

THE
BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. XC.]

THURSDAY, APRIL 23, 1874.

[No. 17.

Original Communications.

ON MALIGNANT SCARLET FEVER.

By EDWARD T. WILLIAMS, M.D., of Roxbury.

Read before the Norfolk (Mass.) District Medical Society, March 11, 1874.

It is designed to embrace here all cases of scarlet fever attended at any period of their course by malignant symptoms. The group of phenomena thus designated are familiar to every physician, and are equally common to many other forms of febrile disease, both specific and non-specific. Their essential feature seems to be a profound depression of the nervous system, marked by coma or low delirium, great weakness of the heart and respiration, and general stagnation of the blood. Their production is variously explained. Some ascribe it to the direct action of a specific poison; but the most scientific view, as it seems to me, is the following: The poison or irritative cause, whatever its nature, excites fever, that is to say, an increase of combustion or retrograde metamorphosis of tissue; the formation of organic waste, exceeding the rate of elimination through the natural channels, causes an accumulation of waste products in the blood, thereby poisoning it and producing a set of phenomena analogous to those caused by urea, bile, carbonic acid, the septic poisons and various narcotic drugs. The resemblance between the action of these poisons and the phenomena of malignancy in disease (leaving the febrile element out of the case) is too obvious to be dwelt upon more minutely. Such is the doctrine of Murchison, one of the highest living authorities on the subject, of the causation of malignant symptoms in fever. Assuming this view as the correct one, the indications for treatment naturally arrange themselves under three heads:—

First, to diminish the formation of waste products.

Second, to promote their elimination.

Third, to counteract their effects.

I.—The essence of fever is combustion or destructive metamorphosis; the amount of waste depends on the rate of combustion; the rate of combustion corresponds with the intensity of the fever; hence, to diminish the formation of waste products is to allay the fever. The means for this purpose are numerous. Diet, rest, water, ice, nauseating doses of ipecac and antimony, cathartics, the cooling salts, aconite and veratrum, bleeding. I believe that the proper use of these remedies both diminishes and prevents the formation of malignant symptoms. To effect this, they should be employed early, and only during the acute stage of the fever, as indicated by a high tempera-

Vol. XC. No. 17.

ture and a strong as well as rapid pulse. The moment symptoms of malignancy become developed, they must be discontinued on account of their depressing influence on the powers of life.

Of the remedies enumerated, my own preference is for the nauseants, cathartics, and cooling salts, on account of their convenience of administration, entire safety, and peculiar effect on the secretions. Their overaction must be carefully guarded against. *Veratrum viride* and aconite, though effective, are hazardous, and require close watching. Cold bathing requires attendance and conveniences not always met with in private practice. Bleeding, universally and properly resorted to before the discovery of other methods of depressing the circulation, has been justly set aside as depriving the system of what will be most needed when the temporary crisis has been bridged over and the period of debility reached.

It has been the fashion of late years to cry down antiphlogistic treatment. This proceeds from two causes: first, its undeniable abuse, especially in former times; secondly, its qualified adaptability to the inhabitants of large cities. It has been shown by an eminent statistician that the rate of mortality in a community regularly increases with the crowding together of population; without doubt, the amount and liability to disease follow the same law; certainly, the average vigor of city people is less than it is in the country, even the wealthier classes, from their sedentary and artificial lives, being scarcely better off in this respect than the squalid poor; they cannot bear depletion as country people can. Hence high authorities in these days, bred up to city and hospital practice, have set their faces against it altogether; yet when we consider that antiphlogistic treatment in some form or other (and the cold baths and aconite of to-day are just as much antiphlogistic treatment as the bleeding and mercury of a few years ago), when we consider that antiphlogistic treatment has constituted the staple reliance of the medical art for over two thousand years, and is so to-day with the great majority of physicians throughout the world, it is extremely hard to doubt either the substantial advantages of its employment, or its final destiny to triumph over the prejudices excited by its misuse and eventually to resume its legitimate therapeutical rank. The only point is not to use it, or to use it very sparingly indeed, with delicate and enfeebled persons.

In scarlet fever, at all events, I, for one, have thoroughly convinced myself of its efficacy in delaying the access and modifying the severity of malignant phenomena, as well as in preventing their occurrence. My entire experience with diseases of a malignant tendency, small-pox, typhoid and typhus fever, cerebro-spinal meningitis, &c., is in full harmony with these convictions, and has led me to place much confidence in them. I must believe, therefore, that a judicious, antiphlogistic treatment in the early stage is the grand preventive and panacea for malignant scarlet fever, the only exception being those very rare cases where the malignancy is absolutely simultaneous with the outbreak of the disease; such cases should be treated upon principles to be discussed presently. Of course, I use the word panacea in a rational sense, without denying that many patients do and must die under this or any other form of treatment.

II.—The second indication for treatment is to promote the elimination of waste products. The agents of elimination being the natural

emunctories, the kidneys, skin, bowels, liver and lungs, medicines which increase the action of these organs will promote elimination, viz., diuretics, diaphoretics, cathartics and emetics. Most of these medicines serve the additional purpose of depressing the circulation, and have been sufficiently dwelt upon in the preceding remarks. The use of emetics to the extent of producing vomiting is an old-fashioned practice, quite abhorrent to the fastidious taste of the present day; I have found them serviceable, notwithstanding, especially when malignant symptoms are just beginning to show themselves; under these circumstances, a full dose of ipecac, with jalap-resin, or some other prompt cathartic, seconded by the free administration of hot drinks, often produces an admirable effect; the portal vessels are disgorged, the skin and kidneys excited to action, and the nervous system stimulated into a new life; a total disappearance of the malignant symptoms and the establishment of a favorable convalescence not infrequently succeeds.

It is hardly necessary to remark that eliminative, as well as anti-phlogistic treatment, is too depressing to be continued after malignant symptoms are fully developed.

It remains to consider the eliminative function of the lungs. The increased formation of carbonic acid in the tissues, requires an increased activity of the lungs for its elimination. This is partially provided for by nature in an increased activity of respiration. It is the physician's duty to see that the lungs are abundantly supplied with fresh air. The free ventilation of the sick chamber becomes, therefore, a matter of prime importance. But, in bad cases of scarlet fever, the mouth and fauces of the patient are loaded with fetid accumulations, by which every breath of air is contaminated and rendered unfit for respiration before it enters the lungs. We know what the expired air is, from experience; consider, then, the condition of the sick patient condemned to batten upon exhalations which turn the stomach of a well man at the faintest whiff. The throat must be cleansed out by gargling and swabbing with chloride of soda, permanganate of potash, salt and vinegar, or some other antiseptic and stimulating wash. I make this an indispensable part of the treatment, even with the youngest children; for the filth, if not removed, will be swallowed, and form a new focus of malignant influence.

III.—The third and last indication is to counteract the effects of the accumulated waste on the system. The most dangerous of these effects is the failure of the heart through innervation. Keep the heart beating, and elimination may complete itself, but the stoppage of the heart is death. The respiratory function is equally important; the moment the breathing flags, carbonic acid begins to accumulate in the blood, producing lividity of the surface and eruption, an increase of coma and weakness, and, by degrees, complete asphyxia. Hence, the necessity for stimulants in doses sufficient to produce a decided improvement of the pulse and breathing. They are not to be given for the coma, delirium, restlessness, lividity, or imperfect development of the eruption, but to stimulate the heart and respiration, whose rate and mode of action form the only true indices of their successful operation. The general looseness of writers on these points is, I believe, the cause of the wide discrepancies of opinion as to the indications and benefits of stimulants in disease. The best stimulants are animal

food, alcohol, carbonate of ammonia, camphor, opium in stimulating doses, quinine, nux vomica. Heat, if deficient, must be supplied artificially. I once saw a person profoundly comatose for more than a week, pulseless at the wrist, with extremities cold and livid to their junction with the body, and jaw drooped as in death, restored to life and consciousness in half an hour by the application of mustard along the spine, after every internal remedy had been tried in vain.

Such cases impress us with the supremacy of art over nature. Art saves when nature alone succumbs. It is the prerogative of Intelligence to govern and direct natural processes, and to counteract them when they tend prematurely towards death.

Progress in Medicine.

REPORT ON PATHOLOGY AND PATHOLOGICAL ANATOMY.

By R. H. FITZ, M.D.

[Concluded from p. 383.]

Cholera and Typhoid Fever.—The action of cholera evacuations on dogs and rabbits was investigated by Högyes (*Centralblatt*, 1873, p. 787). It was concluded that their action was injurious upon different animals to a different degree, manifested by an inflammatory alteration of the stomach and intestine. The animals were rendered more susceptible to this by the previous induction of a gastric or intestinal catarrh. Where the respired current of air was saturated with particles from non-disinfected cholera dejections, the same symptoms were produced as from their immediate action upon the stomach, colon, or venous system. The dejections disinfected by carbolic acid, seemed to be harmless. The air, in the former instance, carries germs which luxuriate upon a favorable soil, while, in the latter, such are incapable of reproduction. Finally, the cholera dejections, freed from morphological elements, can produce the same pathological action as those containing such elements.

With reference to typhoid fever, Birch-Hirschfeld (*Allgemeine Medicinische Central-Zeitung*, 1873, p. 1215) made some statements before the Association of Naturalists. A form of bacterium was found in the dejections in greater number than in those of other diseases. These are most numerous in the second and third weeks of the affection; and at the height of the disease the main part of the stools is composed of such. A microscopical examination of the blood gave negative results.

The attempt was made to produce the disease in rabbits. Subcutaneous injection of the unfiltered stools produced a local, phlegmonous inflammation, and death within four days. An examination of the intestines gave no positive results. In two instances, blood from typhoid patients was injected subcutaneously. Continued, moderate fever followed, and the animals died in two and three weeks, respectively. Considerable enlargement of the spleen was found, but no alteration of the intestines. Dejections were then administered by the mouth. Small, continued amounts produced varying results, none typical. The animals killed showed a slight swelling of Peyer's

patches. The single or repeated administration of large quantities (fifteen to twenty grammes) was efficacious according to the amount, particularly if the animals were compelled to hunger previously. Further, the dejections taken at the height of the disease were most active. The majority of the animals thus experimented upon died within thirty days after the first administration. The pathological changes consisted in a more or less pronounced swelling of Peyer's patches, especially at the ileo-cæcal valve and in the vermiform appendage. The infiltration of the patches was often very considerable; they were dirty-yellow or white, the individual follicles often run together. In the milder cases, or during retrogression, the patches were reticulated. In two rapidly fatal cases, small, ulcerated patches were found. The mesenteric glands were infiltrated, in the later stages cheesy. The spleen, in most cases, was considerably swollen. Pneumonia formed a frequent complication.

In a series of controlling experiments, simple diarrhoeic stool produced gastro-enteritis, especially of the upper part of the small intestine, but no particular swelling of Peyer's patches. When the dejections were filtered, the sediment acted intensively, but more slowly; the filtrate produced a slight degree of infection. Küchenmeister informed the experimenter, toward the close of his investigations, of a spontaneous disease existing among rabbits which produced alterations of the intestines, resembling those occurring in typhoid fever. Bollinger remarked that similar experiments on dogs and pigs gave negative results, and that typhoid fever did not exist in horses, dogs, or cats.

PATHOLOGICAL ANATOMY.

Pulmonary Apoplexy in connection with Cerebral Hæmorrhage.—It is well known that Brown-Séquard has produced, among other effects, hæmorrhages in various parts of the body, notably of the lungs, by lesions of the base of the brain, and of the brain itself. The results of these experiments have been regarded as almost constant. Ollivier (*Archives Générales*, 1873, p. 167) and Hughlings Jackson (*British Medical Journal*, 1873, p. 483) bring forward evidence to show that similar occurrences take place in connection with apoplectic hæmorrhages in the brain, Jackson even stating "the effects of any comatizing lesions being included in this term" (cerebral apoplexy). Ollivier finds nodules of hæmorrhagic infarction on the side opposed to the seat of the cerebral lesion, while Jackson sees them in the lower lobes particularly. Ollivier attaches much importance to the volume of the cerebral hæmorrhage. It must be great enough to produce pressure at the base; and, in his cases, the blood had extended outwards beneath the arachnoid. When a less degree of cerebral hæmorrhage was present, the hæmorrhagic nodules in the lungs were absent.

The two observers differ as to theory of causation. Jackson regards the nodules as due to embolism, while Ollivier seeks an explanation from the experiments of Brown-Séquard, Bernard and Longet, and regards the changes as due to an irritation of the vaso-motor nerves. In his paper, he states that two cases are omitted, as there were cardiac lesions which might complicate the etiology.

Baréty (*Gazette Médicale*, No. 30; *Revue des Sciences Médicales*, 1873, p. 620) presented a number of observations bearing upon the same general point.

Aneurisms Caused by Emboli.—Ponfick (*Virchow's Archiv*, vol. 58, p. 528), after alluding to the permanent local effects of transported emboli, considers the possibility of peculiar physical alterations being produced by benignant emboli. He found a recent perforation of a small, arachnoidal artery and the adjacent membrane, with an embolus partly within, partly without the vessel. Also, a calcified body in a small sac connected and communicating with a similar vessel. Further, a centripetal, arterial dilatation in connection with an adherent embolus, and an aneurism connected with the splenic artery containing a small, white body. These appearances were observed in a case of recurrent, aortic endocarditis with numerous, in part calcified, vegetations. A relation of cause and effect was suspected, and for the past two years, while assistant at the Berlin Pathological Institute, he has examined bodies with reference to this point. Six analogous cases have been found, and a coincidence between valvular endocarditis and the formation of aneurisms was established.

The histological structure of the aneurism showed that, as a rule, the wall was new-formed, and not a simple, locally-expanded adventitia. The usual sources of aneurism were eliminated by negative evidence. Positive, were a recurrent, verrucous endocarditis of the left side of the heart, with vegetations in part calcified; arterial obstruction by vegetations and calcified bodies which must have originated from the valves; in several instances, these had perforated the wall of the vessel to a greater or a less degree, or were found entirely, or in part, in the aneurismal sacs. He considers that the emboli produced the aneurisms, on the ground of the rigidity and density of the emboli, their irregular, jagged surface, and the sharpness of their ends. As a result of the latter characteristics, the vessel is only partially obstructed, and, consequently, the amount of blood passing through, diminished in volume, has an increased velocity; thereby the rigid body is pushed farther into the wall.

Theoretically, there is no objection to the idea of softer clots leading to a perforation of the wall of the vessel, the other conditions being present. The seat of the embolus is most essential, it being always immediately beyond the point of division of an artery. Considerable importance is attached to the condition of the surrounding parenchyma, which was found to possess a slight degree of density (brain, fat tissue), therefore affording less resistance to the blood pressure.

Ponfick also considers that an acute aneurism of the heart may result from the repeated blows of vegetations attached to the semi-lunar valves against the parieties of the heart. This would be favored by a retraction of the valves, producing insufficiency. So with the valvular aneurism, the most frequent cause of the acute, partial aneurism of the heart, the cardiac ulcer of Rokitansky.

The common factor in the origin of these conditions is an abnormal body in the blood current, which has originated from successive deposits from the blood, and which is pressed against the wall with rythmical regularity by the force of the circulation. A necrosis of the wall occurs, blood is forced through this part into the region beyond, and, finally, a saccular tumor results, in permanent communication with the bloodvessel.

Rickets and Osteomalacia.—Heitzmann (*Allgemeine Medicinische*

Central-Zeitung, 1873, p. 8) made an interesting communication to the Vienna Medical Society concerning the origin of the disturbances occurring in such cases. He alludes to the experimental attempts to soften bones, by Guérin, through a flesh diet, Wegner, by phosphorus and simultaneous withdrawal of lime salts, and Chossat by the removal of lime salts from the diet. His own course of experiments was suggested by the recorded observations of the presence of lactic acid in the urine of those affected with rickets and osteomalacia, and in the fluid from cysts formed in cylindrical bones in cases of the latter affection. The lactic acid was administered in the food, and by subcutaneous injection. The supply of lime salts was limited, not entirely withdrawn. In the second week, appearances of rickets were noticed in dogs and cats, namely, swelling of the epiphyses of the long bones and of the external ends of the ribs. The swelling increased up to the fifth week, and the bones of the extremities became crooked. A catarrh of various mucous membranes, twitching of the extremities, and emaciation accompanied. The microscopic examination of the epiphyses furnished appearances completely corresponding with those observed in the epiphyses of rickety children.

The continuation of the lactic acid diet was attended with a diminution of the swelling of the epiphyses, and a certain degree of retrogression of the crookedness of the bones. The catarrhal condition was frequently repeated. After a period of four or five months, the cylindrical bones became softened, till, finally, they were as flexible as willow twigs, or fish bones. The cortical layer was thinned, the marrow contained a largely increased amount of blood. The scapula was thin, like parchment, and pliant. The microscopical examination of the bones, after a continuance of the diet from four to eleven months, presented similar appearances to those found in the bones of individuals dying from osteomalacia.

The rabbits experimented upon died from inanition, and presented no appearances of rickets or osteomalacia. A squirrel became affected with the latter condition, only.

His conclusions were that, in the carnivora, rickets may be produced at the outset; later, osteomalacia; while in the herbivora, the latter may result without a preceding rickets; and that the two processes are identical, the same agent producing rickets when the animal is young, and osteomalacia when older. A fœtus, of seven and a half months was shown, born from the woman who had fed the animals for many months previous. Death had resulted from sub-arachnoidal hæmorrhage, occurring during delivery. An extreme degree of rickets existed, the bones were cartilaginous to a very unusual degree, some crooked, giving evidence of intra-uterine fracture. The question as to the causative influence of the lactic acid in this case was left undecided.

SIR THOMAS BROWN says:—"Riolanus (1550) observeth that a man deaf from a bad conformation of the organs of the eare, pricking his eare too deepe, unawares pierced the tympane membrane and moved or broake the little bones, and afterwards came to heare: and, thereupon, proposeth the question whether such a practise might not bee attempted, which I confess I should be very warie to encourage; and I doubt few have attempted that course which he also proposeth agaynst the *tinnitus* and noise in the eares; that is to perforate the *mastoides*, and so afford a vent and passage unto the tumultuating spirits and winds."

Reports of Medical Societies.

BOSTON SOCIETY FOR MEDICAL IMPROVEMENT. F. B. GREENOUGH, M.D., SEC.

DEC. 22, 1873.—*Lithotomy*.—Dr. H. J. BIGELOW reported two cases, and showed the calculi.

1.—An old negro waiter, 60 years of age, and for many years an inhabitant of this city, entered the Massachusetts General Hospital on the 14th of last November, having suffered for about a year from pain in the back, and a sensation in the end of the penis that was relieved by pulling upon the prepuce. During the last six months, he sometimes had intense dysuria, and the urine, that had previously been free, would occasionally stop as suddenly as if it had been shut off by a valve. For some months, also, he had had spasmodic pain after micturition; much hæmaturia of late, and at several different times retention of urine. There was great agony when riding, and sometimes when walking. On the 15th, the operation was performed.

The stone, which is quite a large one, measures two inches and five eighths in length, two inches in width, and one inch in thickness; upon one surface there is moderate roughness, but upon the other the roughness is considerable, this last being probably the one that had been exposed in the cavity of the bladder; color, brownish upon the roughest or upper surface, and much lighter upon the other, with some crystalline appearance towards the edges. A broad and deep abrasion upon the upper surface is, of course, due to the action of the forceps in the extraction of the stone.

Chemical analysis, by Dr. Edward S. Wood:—Having drilled a hole into the under surface of the calculus, he found that it consisted of three portions:—

“1st. An *external crust*, which is rough, quite hard, and, when pulverized, leaves a white powder. It consists chiefly of the phosphate and oxalate of lime, but contains also small amounts of triple phosphate and the urates of sodium and ammonium.

“2d. A *middle layer*, between one eighth and one fourth of an inch in thickness, which is very hard and dense, and leaves a brownish dust when reduced to powder. It consists of uric acid and the phosphate of lime.

“3d. A *central portion*, which is quite soft, and furnishes a reddish-brown powder, which consists almost wholly of uric acid. It contains, however, a minute amount of the phosphate and oxalate of lime and triple phosphate. These last substances may have been derived from the external crust, since a slight admixture could not be prevented in drilling.” The calculus weighed two ounces, three drachms and twenty-two grains.

Until the 26th, the patient did well, when there was found in his bed, in the morning, about a pint of coagulated blood. The pulse was weak, and he gradually sank, with a moderate amount of pain much of the time, but no further hæmorrhage. Death occurred on the 29th, at 1, A.M.

The bladder was not thickened, but was larger than natural, and everywhere, upon the inner surface, rough, without polish, and of a dark-greenish color, though not very offensive; lymph upon the incised

surface, but none within the bladder. Slight pleurisy; and, in the brain, the remains of an old clot that had not been suspected. The muscles also contained great numbers of trichinæ.

II.—A man, aged 37, entered the hospital on the 29th of last August; an inhabitant of this State, and a moulder by profession. For the last two or three years, he had had pain in the neck of the bladder during micturition, with sudden arrest of the flow of urine; also, acute pain when he rose from a chair or rode in a jolting vehicle. He was getting worse, and, on the day after admission, the operation was performed.

Until the 5th of September he did well, but on that day the wound was found to be sloughy. On the 8th, there was a chill, and during the three following days several others. On the 13th, labored respiration, with distressing cough, a muco-purulent expectoration mixed with blood, and physical signs of disease in the lower part of the chest. On the 15th, at 4, A.M., he died; and, though an examination was refused, there could be no question that pyæmia was the cause of death.

The calculus is spheroidal, considerably flattened, and measures one inch and one fourth by one inch and one eighth. Weight, since it was sawed and dried, one hundred and thirty-seven grains (avoir.). It consists mainly and uniformly of a coarse, brown, somewhat laminated and somewhat radiated structure; with a thin, whitish, granular deposit upon the surface.

Chemical analysis by Dr. Wood:—

"The *external coating* consisted of a mixture of oxalate and phosphate of lime.

"The *middle layer* consisted principally of the oxalate of lime mixed with a little phosphate of lime.

"The *central portion*, which was next the nucleus, had the same composition as the middle layer, although being a little darker in color.

"The *nucleus* has been shelled out in the process of sawing."

Aneurism of the Heart.—Dr. SHATTUCK reported the case and showed the specimen.

J. B. B., a Frenchman by birth and a jeweller by trade, 44 years of age, entered the Massachusetts General Hospital December 25, 1871. He reported that he had not felt well for a year. His abdomen had been swollen for four months, but he had kept at his work until within a fortnight, when he took to his bed, which he kept mostly on account of dyspnoea and weakness. He stated that for a considerable time he had been unable to lie on his right side.

On entrance to the hospital, the abdomen was much distended, flat inferiorly. The sounds of the heart were slightly modified. The respiration was normal. On examination, the density of the urine was found to be increased; it contained neither albumen nor bile. The urea, chlorides and earthy phosphates were normal, but the urates were abundant.

It was thought that the patient might have cirrhosis of the liver. He was treated by elaterium and other appeals to intestinal secretion. On April 1, 1872, the abdomen was tapped, and twelve ounces of clear serum were removed. Inappetence, dyspepsia, progressive dyspnoea and weakness were marked symptoms. The patient died April 6, 1872,

having vomited frequently and retained little food for several weeks.

Autopsy.—On removal of the sternum, the pericardium was found to extend into the left mammary and upper hypochondriac regions. The lower lobe of the left lung was pushed backwards and upwards, and adhered to the pericardial sac. The parietal and visceral pericardial surfaces were intimately adherent through the presence of old, firmly-organized, fibrous tissue. The heart was somewhat hypertrophied and dilated, and the muscular substance was firm. The valves of both ventricles were apparently normal. In the right ventricle, towards the posterior wall, at the angle formed by the interventricular septum, the muscular substance was converted into a dense, white, fibrous tissue.

In immediate connection with the left ventricle, was a sac, nearly as large as the heart itself, and so intimately connected from its apex to its base that no dividing line could be made out. Its walls, which were about three lines in thickness, were not muscular, and the inner surface had several thin, laminated, variously decolorized coagula, beneath which were occasional, more or less hemispherical, somewhat irregular, elevated masses, apparently degenerated, coagulated fibrine. The cavity of the sac was filled with freshly clotted blood, and communicated freely with the left ventricle by means of two circular openings, with sharp edges, large enough to admit the forefinger, and situated on either side of the hypertrophied and somewhat fibrous papillary muscle of the mitral valve, about half way from the apex to the base.

The wall of the left ventricle surrounding these openings was thin, white and firm, the appearance suggesting that of the central tendon of the diaphragm.

One of the openings is about five-eighths of an inch in diameter, now that the specimen has been preserved in spirit, and the other is half an inch, and the distance between the two is three-fourths of an inch.

At a subsequent meeting of the Society, Dr. Jackson referred to Mr. Thurnam's large collection of cases of aneurism of the heart, and in some of which there were two, three, and even four sacs. The following extract from Mr. Thurnam's article bears upon the above case: In two, "it is not improbable that two sacs, which were originally distinct, had coalesced so as to form a single aneurism; and, in another case, three sacs seem to have united in this way." In the case above reported, Dr. Jackson remarked that, although there were two openings into the sac, there was no appearance within to show there had been a coalescence of two cavities.

Fibroid Tumor of the Uterus, of immense Size.—Dr. WM. G. WHEELER reported the case. He said it had been under his observation for the last ten years, and the death was caused by a sudden attack of hæmorrhage from the cavity of the uterus. The specimen is interesting from its size, and it is instructive; also, from the fact that in its development there was a total absence of some of the most important diagnostic symptoms of fibroid growths in the uterine walls. Thus,

There was no disturbance of the menstrual functions.

There was no change in the length of the cavity of the uterus; therefore, the sound, so valuable as a means of diagnosis in uterine disease, gave no assistance in this case. The autopsy explains this point.

Again, there were no frequent attacks of menorrhagia, because the mucous membrane was not invaded until the fatal attack.

The history of the case was as follows:—

About ten years since, this patient presented herself. She had been suffering, for two years or more, from a severe trouble of the rectum, which she supposed to be piles, as she had been treated for such a malady by the family physician. Her general appearance, then, was healthy, and her color was good. Her height was medium, and her figure slight. Her usual weight, when in health, was about one hundred and three pounds. At this date, she was about 42 years of age, and was the mother of three healthy children. The last and youngest was then but six years old.

On examination, the mucous lining of the rectum was found prolapsed considerably, the veins varicose, and granulations bleeding upon the slightest touch. The whole region was sensitive and painful, causing her great difficulty in defecation, and she could only obtain an action by large fluid injections. By a digital exploration, I found an obstruction or pressure of a mass upon the recto-vaginal septum, which, at first, suggested the thought that it might be only retroflexion of the uterus. But, upon a more thorough and vaginal examination, this mass was found to be a tumor, pressing backward upon the rectum, and nearly filling the entire cavity of the lower pelvis. This solid growth seemed to have displaced the uterus, and was connected with that organ. It was quite firm and smooth to the feel, and, at times, somewhat sensitive upon pressure.

At this stage of the investigation, the question of diagnosis was of the utmost importance. Was it malignant, or non-malignant? Was it a tumor to be attacked, or one to be let alone? The absence of pain or apparent cachexia seemed in favor of its being non-malignant; also, its gradual growth and its central position in the abdomen. Then the mobility, firmness and somewhat lobulated outline, together with the slight effect upon her general health, pointed strongly to its true character, namely, a fibroid tumor of the womb, originating near the peritoneal surface.

The growth seems to have been, first, backward and downward, pressing upon the rectum and the bladder, and filling the lower pelvis; thence upward, slowly appearing above, in the cavity over the symphysis pubis, and thence arriving very gradually at the umbilicus. When at about this point, it began to anteverte over the pubic bone, thus lifting its lower part up and out of the small pelvis, putting the vagina and its attachments upon the stretch, and pressing upon the bladder so as to cause much distress. But this movement of the tumor gave great relief to the painful symptoms connected with the direct pressure upon the rectum.

During most of the years that this tumor was gradually reaching this enormous size (fifty-two pounds), the general health suffered but little, comparatively, for no other organs of the body seemed to be diseased. The appetite and digestion remained good, and she was able to do her own house work, even up to the last. She suffered but little pain, except from pressure upon the abdominal organs, weight and over-distention. She expressed difficulty in lying down, and, when on her feet, used a sling from her shoulders to support the tumor.

Another fact worthy of mention in this case is, and it will be plain

from the autopsy, that the whole menstrual life was passed without any disturbance from this extensive outgrowth. The menses appeared early in life, and were painless and regular as to time (even to a day), and normal as to quantity and in character. She passed her climacteric without any unusual symptoms, the catamenia having ceased about one year since. The tumor continued its growth, gradually, up to the time of death. During the last three or four years of her life, she was confined to her house, the weight having become too much for her strength; there was a gradual wasting of the various tissues of the body, but the mind remained hopeful and cheerful to the last. The fatal attack of hæmorrhage was from the cavity of the uterus, and it came on without any apparent cause, while the patient was quiet. It was profuse in quantity, exhausting in its effects, and caused death on the third day.

Autopsy.—The surface of the body was pallid, and the emaciation was extreme. Large and tortuous veins were found traversing the skin covering the tumor. There was some infiltration of the tissues forming the lower part of the abdomen. There was no œdema of the lower extremities, and no ascites. The muscles of the abdomen had been converted, by pressure and extension, into mere fibrous bands.

The tumor, which was closely connected with the uterus by old peritoneal adhesions, filled a good-sized wash-tub, and weighed fifty-two pounds. The attenuated body weighed only sixty-two pounds without the tumor. The surface of the growth was whitish, or rather, in spots, of a pale flesh color; it was divided into many lobes, some of which were more dense than others, but all were quite firm, without any points of ossification. The interior consisted of a coarse, white fibroid structure. The tumor arose, as had been suspected, from the fundus of the uterus, anteriorly, and by a pedicle about two inches in diameter; this last being traceable through the parietes of the organ and down to the mucous membrane, which showed by its discoloration at this part that it had been the source of the fatal hæmorrhage. The uterus itself was five inches in length, and no other fibroid tumors were found. The other viscera were healthy.

At the suggestion of Dr. Bowditch, a cast of the immense mass was taken, and it is now in the Museum of the Medical College.

JAN. 26, 1874.—*Result of Renal Disease.*—Dr. JACKSON showed the specimen, which he had received from Dr. F. H. Thompson, of Lancaster.

It is a cyst that measures, now that it has been dried, about six by three and a half inches, and is entirely cretaceous. The inner surface consists of flat and rather thick plates, a few lines in diameter, and in close juxtaposition. Externally, there was in the recent state, and is now, no trace of the botryoidal form that is so characteristic of this disease of the kidneys. The cavity of the sac was filled with a homogeneous substance that perfectly resembled plaster of Paris when mixed with water and about ready to set; and this was shown in a dried state.

The diseased mass was situated in the right iliac fossa, and the ureter was traced from it to the bladder; there being nothing above it and in the place of the right kidney. The left kidney was in its usual situation.

Dr. Edward S. Wood, Professor of chemistry, found the contents to

consist of the carbonate, phosphate and oxalate of lime in about equal proportions, with a small amount of the carbonate of magnesium and ammonio-magnesium phosphate. Of animal matter, he found not more than one tenth part, and this consisted of albumen and organic *débris*.

The patient, a widow, died at the age of 72 years, of a malignant disease of the womb; and had never, so far as was known, had any affection of the kidneys.

Dr. ELLIS said that, taking into consideration the statement of the physician that this specimen was a kidney, and the result of the chemical examination, showing the presence of urinary salts, it might be that, after all, this was only an exaggerated form of what is not unfrequently seen, and what in the older books is described as tubercular disease of the kidney. In these cases, the ureter becomes impervious and the calices get distended with inspissated pus and urinary salts. We might suppose this to be possible where the distention is carried on even to the extent to which it must have been in this case.

Dr. JACKSON had seen kidneys reduced to a mere cyst, but he had never seen any such material as the contents of this specimen, nor had he ever seen a case where there was not something in the form of the cyst to remind one of a kidney.

Dr. WHITE said that oxalate of lime was never found except in connection with the renal apparatus, with the exception of the contents of the stomach. The other urinary salts might, perhaps, occur in pathological growths not connected with the kidneys.

INTERMITTING LAMENESS.—A very curious thing has been described by Dr. Sabourin, namely, that lameness may ensue from obliteration of arteries. Horse lameness is often so obscure that any light proves desirable. It is not, however, confined to the horse, but extends also to man. The cause, as observed, is owing to obliteration of the aorta and iliac arteries. Commonly, in previous good health, the subject begins to limp (*boiter*), in one or two limbs to tremble, and finally to fall. Rest is commonly productive of relief. MM. Bouley and Goubaux long ago pointed out the nature of the affection in horses, while M. Charcot first pointed out its occurrence, comparatively rare, in man. Arteritis has been supposed to be the occasion in horses, owing to the violent efforts they have to make; and embolism in men. In any case, the occurrence affords a favorable illustration of the advantages of the study of comparative pathology.—*The Doctor*.

PORTA AND VALERANI ON THE RADICAL CURE OF VARIX BY THE INJECTION OF HYDRATE OF CHLORAL.—Professor Luigi Porta, in an article communicated to the Lombardian Institute, gives an account of the clinical observations which he has made on the coagulant property of hydrate of chloral, and especially of its use in the treatment of varix. He reports fifteen cases of varix of the leg treated successfully by the subcutaneous injection of hydrate of chloral, beginning with a gramme, and then reducing the dose to a half or a third of a gramme. The coagula are formed at once, and the patient is confined for a few days to bed, to obviate the risk of phlebitis. The coagula are ultimately absorbed, and the veins become hypertrophied, or remain pervious, though not varicose.

Dr. Valerani, writing on this subject, says that any method for the cure of varix should be free from danger, either immediate or remote, easy of application, and fairly constant in result. All these conditions are present in the treatment proposed by Porta.—*The London Medical Record*.

VOL. XC. No. 17A.

Bibliographical Notices.

On Diseases of the Chest; being Contributions to their Clinical History, Pathology and Treatment. By A. T. H. WATERS, M.D., &c. Second Edition, revised and enlarged. Philadelphia: Lindsay & Blakiston. 1874. Pp. 431.

THE first edition of Dr. Waters's book appeared in 1868, and was well received. The present edition contains new chapters on hæmoptysis, hay fever, aortic regurgitation, mitral constriction, thoracic aneurism, and the use of chloral in certain diseases of the chest; other chapters have received additions of cases and remarks on treatment. Some characteristic sphygmographic tracings have also been added.

The new lectures, as far as clinical history and pathology are concerned, contain little or nothing new or especially interesting to the practitioner, but are suited rather to the wants of the student. On the subject of treatment, however, which is, in the nature of things, so largely empirical, the experience of so careful an observer as Dr. Waters appears to be, is valuable to us. In the treatment of copious hæmoptysis, Dr. Waters insists upon rest as being very necessary, as he believes that pneumonia and phthisis are not infrequently the direct results of the irritation of the blood in the lung, agreeing in this opinion with Niemeyer. In severe cases, he always applies ice to the chest; not long enough, however, to produce a chill. Gallic acid he esteems more highly than any other medicinal agents, and he sometimes uses dry cups. His experience in the use of ergot is not favorable.

In regard to hay fever, the author speaks, as many medical writers have done, from personal experience. He considers this disease to be due to "emanations from various flowering plants," though he does not accept the view (recently put forth by Blackley, especially with reference to his own case) that the pollen is the sole exciting cause in all cases. He believes that "certain atmospheric conditions—conditions, indeed, very opposite to each other—warmth and moisture on the one hand, and hot, dry, bright weather on the other," may either produce the disease or keep it up. A noticeable symptom in two of Dr. Waters's attacks was a *periodical insomnia*, which recurred and subsided at certain hours each day. He seems to have suffered more in a *warm, moist atmosphere*. In the summer of 1868, which was hot and dry, he did not suffer at all, though he was in the country during a part of the time. He had no attack in 1869, which was also hot and dry. The author says, however, that there can be no doubt that dry, hot, bright weather produces the affection in some people. He found relief from carbonate of ammonia, and thinks tonics very essential in the treatment.

In the treatment of thoracic aneurism, the author thinks that the plan of prolonged rest in the recumbent posture, and somewhat scanty diet, is deserving of more extended trial. The rest must be perfect and prolonged. The patient should be allowed a small quantity of meat daily, and very little fluid. He says that he has no personal experience with the use of galvanopuncture in this disease, but should be disposed to try it in any suitable case. He thinks the iodide of potassium may be of service, though he cannot speak confidently.

Chloral is especially recommended for procuring sleep in those cases of bronchitis complicated with emphysema, in which, on account of the profuse secretion and diminished expectorating power, life is threatened. The author implies that with this agent there is not the same tendency to check expectoration, and thereby increase the liability to death, as there is with opium. He has found chloral useful also in checking irritating cough, in asthma, and especially for procuring sleep in organic disease of the heart. He thinks that there is a risk in giving chloral in cases of chronic alcoholism, especially if the patient is in the habit of smoking much as well as drinking freely. His precautions against the rejection of this remedy by the stomach

are worth following. He prescribes it with tincture of orange peel, or syrup of tolu, and an aromatic water; to be taken, well diluted, *when in bed*, as even walking across the room will often lead to its being vomited.

The remarks in regard to the use of the sphygmograph in valvular affections of the heart are very just. The author says we derive no aid from it in determining the site of the disease, but he is disposed to think that it may enable us, in some cases, to form a more correct opinion as to the amount of valvular insufficiency or constriction, and thus aid us in our prognosis.

Medical and Pharmaceutical Notes. By EDWARD R. SQUIBB, M.D. Philadelphia: Sherman & Co. 1874.

THE products of Dr. Squibb's pen, as well as those of his laboratory, are pretty sure to have a genuine value. This pamphlet is no exception, and furnishes a good deal of useful information to physicians and apothecaries. With reference to the former, we will offer a few useful selections.

Dr. Squibb finds that one seventh of one per cent. of carbolic acid is sufficient perfectly to protect a solution of any alkaloid from the development of confervoid growths so common in solutions kept for hypodermic use. The solutions should be made with distilled water and be carefully filtered. If made with common water, double the quantity of carbolic acid is required. He does not state definitely whether this proportion of carbolic acid is entirely unirritating, but says that one thirteenth of one per cent. is "entirely unobjectionable for the delicate purposes of eye-surgery."

Ergot in the market is of very variable quality, and consequently its preparations must vary, even if made by official processes. "There can probably be no better preparation of ergot than the official fluid extract of the U. S. Pharmacopœia of 1860." Dr. Squibb prepares a solid extract by evaporating this to dryness at a very gentle heat, and an aqueous solution of this may be used for hypodermic injection. Its permanence is not yet ascertained, and it should consequently be made frequently. It has also produced abscesses.

The last article of special interest to physicians is that on pocket medicine cases, of which Dr. Squibb describes a modification, containing, besides the vials, tubes for measuring and dropping liquid contents. A list of concentrated preparations is given, most of them in the liquid form, from which the physician would have no difficulty in selecting all and more than all that might be necessary in a hurry or in a country practice.

BOOKS AND PAMPHLETS RECEIVED.

Herpes Gestationis; a Rare Affection of the Skin peculiar to Pregnancy. By L. Duncan Bulkley, M.D. New York: William Wood & Co. 1872. Pp. 32.

Post-mortem Changes *versus* Ante-mortem Lesions. By Stanford E. Chailli, A.M., M.D.

The Medical Colleges, the Medical Profession and the Public. By Stanford E. Chailli, A.M., M.D.

THE SOLAR RAY AS AN ESCHAROTIC.—Dr. R. S. Goodwin states that, for several years, he has used the concentrated rays of the sun for the destruction of nævi and other troublesome superficial growths of the skin, and recommends this agent as an efficient and convenient caustic. By its aid, he has destroyed chancres, and also condylomatous growths of a syphilitic origin. He employs a double convex lens, about two and a half inches in diameter, and having a focal distance of nearly ten inches. No other caustic, he thinks, leaves behind so little scar as this. Among its other advantages, it never gives rise to hæmorrhage; the pain inflicted is not excessive, and is not prolonged after the operation, while it is rarely followed by supuration or inflammatory action.—*The Medical and Surgical Reporter*.

Boston Medical and Surgical Journal.

BOSTON: THURSDAY, APRIL 23, 1874.

THE good work which our State Board of Health has been engaged in for the last five years has been so energetically carried on that, in spite of any doubts that might have been entertained at the outset, as to the advantages to be derived from such a Board, it has gained steadily in public favor, and its reports are looked forward to yearly with increasing interest. The fifth annual report proves to be not less interesting than its predecessors. Indeed, the past year has, unfortunately for the Commonwealth, been fruitful with opportunities for the Board to distinguish itself, and these, as the report will show, have not been thrown away. We have been visited with numerous epidemics, and threatened with others; while the citizens of Boston have begun to experience some of the drawbacks which are, doubtless, the almost inevitable concomitants of a metropolis rapidly growing in numbers and prosperity. It is under such circumstances as these that the usefulness of a body of experienced men, whose duty it is to protect our interests, health, and, perhaps, even our lives, is practically demonstrated. Those who read the record of the past year will find that the members of the Board have not only adequately met the responsibilities of the hour, but have also found time to conduct investigations into numerous subjects of interest, and into some of great importance.

In the general report, the epidemic of smallpox, which, at the time the last report was issued, was at its height, is noticed, and attention is called to the protective power of vaccine, as shown at that time; and the need of re-vaccination is spoken of as being necessary, at least, once after mature life. What local Boards of Health did in this epidemic, supported and advised as they frequently were by the State Board, to whom, in many cases, they owed their origin, has become a matter of history. Fortunately, Asiatic cholera did not reach us, but the warning and instruction given last year will, we hope, not be thrown away, should, with returning summer heat, the disease appear in this part of the country, a danger which the report states to be quite in accordance with the previous history of this epidemic.

The question of sewerage is again emphatically brought to the attention of the Legislature, and the need of a comprehensive plan for the sewerage of the whole metropolitan district is urgently pressed. It is almost needless to say that this is a subject of vast importance to the future welfare of the city, and yet one that has, thus far, in spite of warning, persistently been neglected. In reference to the Miller's

River nuisance, the Board says, in regard to slaughtering houses, "were this business removed to a suitable place, with ample space, direct drainage to strong, tidal currents, and buildings planned with special reference to sanitary safety, the slaughtering of swine for exportation might be extended without limit, and without prejudice to public health, comfort or convenience."

It is pleasant to turn from thoughts suggested by such odorous subjects as these to the description of the neat and orderly buildings of the Brighton abattoir, a monument to the industry and efficiency of the Board in reforming what was, in time past, one of our great nuisances.

Our space does not permit of more than an allusion to some of the numerous interesting documents which accompany this report. The Chairman of the Board, Dr. Bowditch, in an article entitled "Preventive Medicine," gives much valuable instruction as to the mode of life necessary for the preservation of health, with particular reference to such precautions as are rendered necessary by our rigorous climate. We should be glad to see such advice as this paper contains placed in the hands of many a good citizen of this State, now sadly in need of the same. Dr. Derby points out, in his paper on "Hospitals," what the hospital of the future ought to be. There is little doubt that a new era in hospital construction is now beginning, and as "it is probable that, within the next ten years, many hospitals will be built in Massachusetts," the remarks of Dr. Derby are timely, and we hope will not be unheeded. Among the other papers given in the report, we notice Health of Farmers, by Dr. Adams, of Pittsfield, a valuable report on the Epidemic of Cerebro-Spinal Meningitis, by Dr. Upham, an exceedingly interesting paper on School Hygiene, by Dr. Winsor, and investigations into the use of zinc iron for the conveyance of drinking water, by Dr. Boardman. There are other communications of equal interest, and we mention the above simply to show the wide range of subjects which have come under the observation of the Board. It is a noticeable fact that the interests of all classes in the community are touched upon in this report, and we hope the valuable, and we may add the very interesting and readable, instruction which it conveys may find its way into every town and village of the State.

WE have seen the prospectus and advanced sheets of a proposed register, to comprise a great variety of data concerning the members of the medical profession in this State, together with a record of societies, institutions, medical schools, charitable associations and other matters—the whole presenting a fund of information of exceeding value. The plan of the Boston Register, issued two years ago, will be

enlarged and improved upon in this directory of the whole State. The editor and compiler is a gentleman well known in the profession, and his aim is to give to his medical associates a work which will prove to them a hand-book, convenient for reference, and accurate in detail. From our personal knowledge of the plan, we feel sure the work merits the hearty coöperation of physicians in its preparation, and their no less hearty acceptance when it shall be completed.

The advantages of such a book need hardly be alluded to. Aside from the value it will carry in itself to every one who has it at hand as a reference book, it will serve a most excellent purpose in presenting the medical profession of Massachusetts in its entirety, and in showing not merely an array of names like a catalogue, but giving, also, what the profession is, what it *has done*, and what is its machinery for accomplishing more in the future. The scheme, unique in its scope and details, has our good wishes for its success.

SIMPLE APPARATUS FOR FRACTURE OF THE THIGH IN NEW-BORN OR VERY YOUNG INFANTS.—At its February meeting, 1874, Dr. Gueniot presented to the Société de Chirurgie at Paris, a very simple contrivance to prevent the flexing of the thigh upon the pelvis, which, he said, was all that it is necessary to do to obtain the least possible displacement. The apparatus consisted of a layer of gutta percha, moulded to the abdomen and anterior part of the thigh, and to be retained there by a few turns of a bandage. The apparatus never need be soiled by the dejections, gives no uncomfortable pressure, and is easily prepared extemporaneously. It need not extend upon the thigh beyond the seat of the fracture. It is effective, and the simplest yet offered.—*Journal de Médecine et de Chirurgie Pratiques.*

CONVICTION OF A QUACK FOR MANSLAUGHTER.—A quack, calling himself "Professor" Morris, has been sentenced at the Hertford Assizes to imprisonment for three months for manslaughter, having been convicted of causing the death of a young man by the administration of five pills containing arsenic, in order to relieve a "cold." The relief obtained was decided and radical.

The Hospitals.

MASSACHUSETTS GENERAL HOSPITAL.

(Wednesday and Saturday, April 8 and 11, 1874.)

OPERATIONS were performed in the following cases:—Hæmorrhoids, Hare-lip, Tumor of Eyelid, Sinus of Arm, Nævus, Hare-lip, Cancer of Lip, Hare-lip, Cancer of Lip, Necrosis, Felon, Fistulæ, Tumor of Back, Felon, Disease of Ankle-joint, Necrosis, Felon. During the week, Hæmorrhoids, Hare-lip and Necrosis.

Hæmorrhoids—in a man. Ligatured by Dr. Clark.

Hare-lip—with cleft palate, in a child two weeks old. Operated upon by concave incisions and united by silk sutures.

Tumor of Eyelid—a small vascular tumor on the lower eyelid of a man. Destroyed by the galvano-cautery.

Sinus of Arm—of three months' duration, appearing without any known cause, in a woman twenty-one years old. It was laid open by Dr. Cabot; no denuded bone detected.

Nævus.—Some small vascular points near the border of the lower eyelid, remaining after the excision of a nævus by the galvanic cautery, were destroyed by the same instrument.

Hare-lip.—The remaining fissure, in the case of double hare-lip reported in the JOURNAL of March 19th, was pared and its external border joined to the portion of the lip which covered the inter-maxillary projection, in a manner similar to that employed in the first operation, the union of which had become firm and symmetrical.

Cancer of Lip.—in a man sixty-three years old. The growth was superficial, and located at the centre of the lip. Dr. Clark excised it by a V incision.

Hare-lip.—double, in an infant four months old. Although complicated with cleft palate, the fissures did not extend into the nostrils. The borders of one fissure were pared and the raw surfaces united with silk sutures, the second fissure being left for a future operation.

Cancer of Lip.—in a man fifty-five years old; recurrent in eight weeks. Dr. Clark removed the disease by a V incision.

Necrosis.—of metatarsal bone and first phalanx of great toe, following an amputation for frost-bite. The fistulous openings connected with the dead bone were enlarged and a loose fragment removed; the distal end of the metatarsal bone, which was also dead, was removed by a chain saw.

Felon.—of thumb. Free incision by Dr. Clark.

Fistule.—in a boy fifteen years old, following ischio-rectal abscesses on each side of the anus, that came on after a horseback ride. They were explored, laid open, and found not to communicate with the rectum.

Tumor of Back.—a firm growth of the size of a hen's egg, adherent to the skin, which was of a deep purplish red color, located three inches from the spinous processes, midway between the crest of the ilium and the last rib. It first appeared about one year ago, and had enlarged gradually until October; since then, it has increased rapidly and been very painful. On its surface, was a cicatrix resulting from an opening made on the supposition that it was an abscess. Dr. Cabot encircled the tumor by an incision, and dissected it from the fascia overlying the latissimus dorsi.

Disease of Ankle-joint.—of three months' duration, in a girl of ten years, following a sprain. Fistulous openings on the inner and outer aspects of the joints communicated with the interior. Dr. Clark laid open the sinuses, and ascertained that the disease involved the cartilaginous surfaces of the tibia and astragalus.

Necrosis.—of terminal phalanx of finger, following a felon. Finger laid open and dead bone removed by Dr. Clark.

Felon.—of thumb. Dr. Clark made a free incision.

Hæmorrhoids.—in a woman. Transfixed and tied by Dr. Gay.

Hare-lip.—in a boy eight years old. The fissure did not involve the nostril. The borders of the fissure were pared and brought together by fine silk sutures.

Necrosis of Femur.—in a man twenty years old. When a child, had hip disease, which had resulted in an ankylosis of the joint, with slight adduction and flexion of the limb. There were four fistulæ over the great trochanter, one of which communicated with dead bone; the others were superficial. The sinuses were laid open, and a large piece of dead bone removed.

H. H. A. BEACH.

BOSTON CITY HOSPITAL.

THE following surgical operations were performed Friday, April 17th:—

Dr. Williams performed Iridectomy in the case of a man whose eyes had been injured by the explosion of powder. The left eye was so much injured that no operation could be done. In the right eye, there was so much opacity of the cornea that sight was very defective. The iris was, however, healthy, and in its lower part—the place of election for the performance of iridectomy—the cornea was clear. Although the prognosis was doubtful,

the operation was justifiable, owing to the present wretched condition of the patient as regards sight. A larger portion of the iris was excised in this case than in the former, because of the presence of so large an amount of corneal opacity. The operator remarked that it was sometimes well to remove, by gentle pressure, the blood which was effused into the anterior chamber, although if allowed to remain it would usually be absorbed.

Dr. Ingalls Re-Amputated the Thigh of an adult male in its upper third. In 1872, the leg was crushed, and it was amputated just above the knee. At first, the result seemed good, but necrosis soon followed, and the femur has continued to be diseased ever since. Now, there are several sinuses leading to diseased bone. An exploratory incision showed the femur to be so extensively diseased that it was decided to amputate it in its upper third.

Dr. Homans operated on a Fistula in Ano by means of the elastic ligature. Some time ago, the patient fell astride a pile of boards. An abscess formed in the perineum, from which a sinus was found to extend into the rectum. A rubber ligature was passed through the sinus and out at the anus and tightly tied, with the hope that the fistula would heal as the ligature cuts its way out.

Dr. Ingalls removed a large portion of the Lower Jaw for malignant disease. Some five years ago, the patient, an old man, noticed a wart-like excrescence on the right cheek, and, about six months since, some sort of an operation was performed by a party unknown. The result was a considerable loss of tissue from the lower lip and about the angle of the mouth on the right side, and an irregular cicatrix extending nearly half way to the ear. The submaxillary glands were not involved, but the jaw was so extensively diseased as to require removal, excepting the ascending ramus of the left side. An incision was made vertically through the lip, and extended parallel with the lower edge of the jaw to the right angle. The tissues were then dissected from the bone, which was sawed through near the left ramus, and its major portion removed.

An Abscess of the Neck was evacuated by Dr. Homans.

F. W. DRAPER.

Correspondence.

FLORIDA AS A HEALTH RESORT.

PEOPLE whose health needs a mild climate in winter are badly off in New England. If they stay at home, it is cold; if they go away, warm weather is far to seek. Eastern North America is not only much colder than the same latitude on the Pacific coast or in Europe, but also more variable. The chief mountain chain runs lengthwise, instead of across the continent, and there is nothing to stop the north winds sweeping from the great surfaces of frozen ground which bound the sub-polar regions. Therefore we see the orange tree periodically killed by black frost as far south as Florida; and the crops of Louisiana as often injured by a sudden fall of temperature as the vineyards near Bordeaux, a city that lies on a line with Quebec. We have no region corresponding at all to the Italian *riviera* which looks to the south, and is protected by abrupt mountains of naked limestone. In default of this, people have, of late, taken to going on the St. John river, in Florida. Travellers may be numbered there by thousands, of whom a large part come from New England.

It is of some importance for invalids to know how they can get there, and what they may expect at their journey's end. One may go by sea or by land. There is a line of good steamers which run to Savannah from Boston in three or four days; and, from Savannah, there are other steamers which make the trip to Jacksonville, near the mouth of the St. John, in about twenty-four hours; of these, some pass down the Savannah river and follow the open sea, while others make the inland passage, following creeks and estuaries for most of the way. Sea-sick people ought not to take this route. The Atlantic,

north of Hatteras, is never still, and physicians should bear in mind that two or three days of sea-sickness often produce, in persons of low vitality, a state of exhaustion from which it is hard to rally.

The distance by railroad is formidable, but may be broken at several places; and may, by good management and the help of Pullman cars, be accomplished fairly. The number of hours is nearly as follows: Boston to New York, seven and a half; to Washington, seven and a half; to Richmond, six; to Columbia, S. C., twenty-four (breaking this at Charlotte, if you like); to Savannah, eight; to Jacksonville, eighteen. It is about the same *via* Wilmington, N. C., and Charleston. Invalids generally get impatient, and persuade their friends to hurry too much. They make one jump from Boston to Washington, a second to Savannah, and a third to Jacksonville. Consequently, they arrive half-starved, and with neuralgia, headache and a feeble, jerking pulse. The golden rule is to make haste slowly, and to carry plenty of "wraps." To be sure, the hotels do not invite much lingering; all those at Washington are poor; the Ballard, at Richmond, is dirty; the Columbia hotel is tolerable. At Savannah, there is a good house, the Screven; and Jacksonville has two good hotels, the St. James and the National. Indeed, once in Florida, and the traveller, be he well or ill, is fairly provided for. There are plenty of good steamers, and comfortable hotels are to be found at the chief places. The country has been overrun by northerners, and the unbearable dirt and laziness of the natives have been thrust aside. Before leaving Jacksonville, the traveller should get a guide-book for the river and adjacent country. There is a nice little work by Brinton, but it is antiquated; there is Appleton's Guide, a catchpenny affair, written in the rapid style of the average newspaper.

Northern Florida, whose base of supplies is Jacksonville, and whose high road is the St. John river, is of modern formation and everywhere very low. The higher ground, rarely more than twenty feet above the river level, is composed of fine silicious sand, supposed by some geologists to belong to the glacial drift. It supports a strong growth of yellow pine, with the great magnolia, the live oak and an undergrowth of dwarf fan palm. The low ground—and a large part of the country is half drowned—is alluvial, covered with a rank thicket of shrubs, such as the swamp honeysuckle and the cornel, among which rise deciduous cypresses of great size. The innumerable tributary streams are more or less choked by floating aquatic weeds and by great banks of coarse water-lilies, which bear a yellow flower, and are called "bonnets."

That most of the country is highly malarious during warm weather, may be read in the bloodless faces and purple lips of those whites whose poverty condemns them to live where they were born. The proverbial *faccia di Albenga* of Italy is quite a healthy countenance in comparison. This danger does not exist in winter, and some people stoutly maintain that the river is healthy until the first of June. Doubtless, however, the words of the Charleston physician are wise: "Do you see that long moss hanging to the trees? That says, 'as soon as the first of May comes, you run!'" Malarial poison is an affair of place and of the constitution exposed to it. Shifting a house a few yards will sometimes make it safe. One man, who is quite reduced by tubercular disease, may experience no trouble; while another, who is much stronger, and only suffers from nervous prostration, may get poisoned within a week. In the face of such uncertainty, and of the profound ignorance of physicians concerning the nature and action of malaria, it is well for invalids to keep on the safe side by retiring as early as the middle of April. They should observe the same rules in returning as in going, and make slow haste; nor forget the precept of one of Boston's wisest physicians, to "come back with the strawberries."

Florida, albeit so equal in surface, offers some variety in air and temperature. The mean of winter temperature is, at San Augustine 58°, at Pensacola 55°, and at the mouth of the Miami river 66°. This last spot is specially praised by Dr. Brinton, but it still remains almost inaccessible. San Augustine is more windy and more bracing than the other inhabitable points.

The river St. John is more relaxing, and its air, although not what we call "damp," is always charged with moisture. Here is the paradise of that great northern legion, sometimes called "shawl and sofa patients" by despairing doctors. They are those people of dry skin and weak heart-action, whose nerves are pulled taut by the first dry cold, and who thereafter are the prey of neuralgia, dyspepsia, and all the other evils that beset a system struggling against odds. Florida is their happy land, where their aches fall off, like Christian's bundle of sins before the cross. Not so for those patients whose trouble in the lungs demands a stimulating climate. They will dwindle there and fade. And so, too, those who are in the late stages of tubercular disease; it is no place for them. But there are many whose air passages are disordered, or who have more serious lung trouble, even, to whom the mild, moist air is grateful.

Then there are warm sulphur waters, at Green Cove Spring, for example, where persons gouty or rheumatic may bathe and promise themselves benefit—which, after all, is much in this life.

On the whole, Florida is valuable, to be used like all alteratives—with discretion. T.

VILLOUS CANCER.

BOSTON, April 16, 1874.

MESSRS. EDITORS,—With your permission, I would call attention to Dr. Fiffeld's communication concerning villous cancer in the last number of the JOURNAL. This seems all the more desirable, as perhaps explanatory of the difference of opinion maintained at the London Societies, and as suggestive of the non-cancerous nature of the tumor of the bladder reported by Dr. Fiffeld and recorded as one of "villous disease." It may be remembered that this tumor was made up of four masses of villi, the smallest ones "attached by a single narrow peduncle to the bladder, and the mucous membrane, even in the immediate vicinity, did not appear to be changed. The growths showed no disposition to increase at the base. The two largest were attached by broader bases to prominent rugæ."

In Follin's description, as quoted by Dr. Fiffeld, the villousities "rest on a firm base, having the consistence of encephaloid, which renders, upon pressure, a creamy juice." So with the description in Frerichs: "The wall of the gall-bladder, upon which they are developed, is thickened, transformed into fibrous areolar tissue, which is soaked with cancerous juice." In Heschl's case, the mucous membrane was thickened, "and presented areolæ," which contained "cylindrical epithelium and fatty granulations."

It seems evident, from these quotations, that different conditions existed, the presence of villi alone being common to all. In the first case, there is no evidence of cancerous disease within the mucous membrane nor within the villi; in the others, the reverse is apparent. These latter might well be villous cancers; the former a villous tumor simply, a papilloma, or, more exactly, a papillary fibroma, and analogous, structurally (so far as the villi are concerned), to the ovarian tumors removed by Dr. John Homans.*

It is well known that a villous appearance may occur in connection with tumors of the most varied character. The villous cancer, however, is cancer with villi, or villi with cancer, or cancer with cancerous villi, all three conditions being possible. In the Cellular Pathology (p. 513), and there is no alteration in the latest edition, Virchow, in speaking of papillary tumors, states, "within the papillæ, a cancerous mass may develop itself" and a cancer of the bladder may exist for some time when "a formation of villi takes place upon the surface."

If the rectal tumor is a papillary fibroma, it would be benignant; as a villous cancer, it should present the structural as well as the clinical features of cancer. From such a point of view, Mr. Gowland's varied results seem to admit a satisfactory explanation.

Yours truly, R. H. FITZ.

Medical Miscellany.

THE FOTHERGILLIAN GOLD MEDAL of the Medical Society of London has been awarded to Dr. John Kent Spender, of Bath, for his essay on Therapeutic Means for the Relief of Pain.

MR. T. SPENCER WELLS has recently reported a successful case of ovariectomy, performed upon a girl, eight years old, sent to him from San Francisco.

THE JOSEPH MATHER SMITH PRIZE.—“Hygiene, in either of its Special Departments,” is announced as the subject of the next annual prize of \$100, to be awarded in March, 1875.

THE EXPORTATION OF OPIUM from Great Britain has increased from 35,848 lbs. in 1840 to 150,414 lbs. in 1870; and the value of the same from £35,609 in 1856 to £196,165 in 1870.

AN INTERNATIONAL SANITARY CONGRESS.—The Foreign Minister of Austro-Hungary is making preparations for an international congress on sanitary matters and quarantine, to which representatives of all nations will be invited.—*New York Medical Journal*.

AN INSTRUMENT has been invented for supporting the affected muscles of the face in cases of facial paralysis. It consists of a silver wire bent so that one end enters the buccal cavity at the angle of the mouth, the other end being fixed above and behind the ear.

WE announced last week that Dr. J. B. S. Jackson had sailed for Europe, but just before the appearance of the JOURNAL, came the startling news that he had been exposed to the fury of a hurricane on board of the unfortunate *Amérique* and to the discomforts of an escape by the boats. Dr. Jackson's numerous friends feel deeply thankful for his preservation, and will join us in the hope that the remainder of his vacation may be pleasanter than its beginning.

THE HEALTH OF ROME.—In spite of the general impression of the unhealthiness of Rome, it appears from the statistics of the city, that, last season, there were but 20 deaths in 17,000 foreign visitors, of which 7 are described as from typhus, 5 from typhoid, probably all 12 from enteric fever, and 1 from pernicious fever, the name given to a severe form of intermittent. Three of the typhoid cases were imported, while only nine of the twenty died from disease contracted on the spot. Thus the death-rate among foreigners was only a little over 1 per 1000. This, however, must not be taken as absolutely correct; for some who were very ill in Rome died in other towns.—*The Medical and Surgical Reporter*.

MIDDLESEX SOUTH DISTRICT MEDICAL SOCIETY.—At the annual meeting, held April 15th, the following officers were elected:—

President—G. J. Townsend.

Vice President—W. W. Wellington.

Secretary—C. E. Vaughan.

Treasurer—J. W. Willis.

Orator—Morrill Wyman. Substitute—E. S. Wood.

Commissioner on Trials—R. L. Hodgdon.

Censors—S. W. Driver, J. L. Hildreth, H. E. Marion, E. R. Cogswell, E. J. Forster.

Councillors—Morrill Wyman, J. B. Taylor, H. Cowles, A. C. Webber, S. H. Hurd, R. S. Warren, A. Hosmer, B. F. D. Adams, R. L. Hodgdon, W. W. Wellington, H. P. Walcott, S. G. Burnap, J. L. Sullivan, H. C. Chapin, E. J. Forster, J. T. G. Nichols, H. O. Marcy.

DECLINE OF MEDICAL STUDY IN FRANCE.—The *Union Médicale*, of February 17th, says that in France the number of medical students, as well as that of practitioners, is on the decline, the medical recruit, both in civil and military life, becoming more and more difficult. Medical studies have now become long and laborious, the physical and chemical sciences being now far more than mere auxiliaries, and forming an important part in the preparation for examinations; and the student, after his laborious and costly career, finds, on getting into practice, that he has no effective protection from the encroachments of charlatans and parasites.—*The Medical and Surgical Reporter*.

NOTES AND QUERIES.

"DOCTOR" DIO LEWIS.

WHAT is his real title? Can any one tell whether he is a doctor of laws, of medicine, or of divinity? And where did he get his title?

THORACENTESIS.

THE operation of thoracentesis, usually accounted of recent origin, is treated of at length by Bonetus, 1684, who says, "the experience of both the ancient and modern makes it clear that several have been saved this way." Indeed, in the time of Hippocrates, it was sufficiently the routine to receive the aphorism "those cases of empyema or dropsy which are treated by incision or cautery, if the water or pus flow rapidly all at once, certainly prove fatal."

TERATOLOGY.

MESSRS. EDITORS,—Where can I find the subject of Embryonic Deformity treated scientifically or otherwise, especially in relation to its causes?

Respectfully,

SUBSCRIBER.

We regret to say that the English language is poor in such works. The best general articles, though very brief, are to be found in the *Pathological Anatomies* of Rokitsansky and Vogel. North gives a very superficial summary in the *London Lancet*, March 7th and 14th, 1840. A most admirable treatise, covering only a portion of the ground, yet in the completest manner, is the *Essay on Diploteratology*, by Dr. G. J. Fisher, published in the *Transactions of the New York State Medical Society*, 1865, 1866, 1867 and 1868. For those seeking further, there exist the classical works of Isidore Geoffroy St. Hilaire (*Histoire des Anomalies*, &c., 1832-37); Förster (*Die Missbildungen des Menschen*, 1865); also the publications of Meckel (1812-1826); Vrolik (1840-49) and Bischoff (*Entwicklungsgeschichte*. Wagner's *Handwörterbuch der Physiologie*, 1842).—Eds.

MORTALITY IN MASSACHUSETTS.—Deaths in eighteen Cities and Towns for the week ending April 11, 1874.

Boston, 152; Worcester, 17; Lowell, 23; Milford, 10; Chelsea, 5; Cambridge, 14; Salem, 12; Lawrence, 11; Lynn, 14; Gloucester, 3; Fitchburg, 6; Taunton, 7; Newburyport, 6; Somerville, 12; Fall River, 16; Haverhill, 6; Holyoke, 5; Pittsfield, 3. Total, 326.

Prevalent Diseases.—Consumption, 52; pneumonia, 41; scarlet fever, 23; croup and diphtheria, 9.

Three deaths from smallpox in Fall River.

GEORGE DERBY, M.D.,
Secretary of the State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, April 18th, 1874. Males, 70; females, 79. Accident, 3; abscess, 1; apoplexy, 4; anæmia, 1; inflammation of the bowels, 1; disease of the bowels, 1; inflammation of the brain, 1; congestion of the brain, 4; disease of the brain, 7; burned, 1; cancer, 2; consumption, 29; convulsions, 1; debility, 1; diarrhoea, 1; dropsy, 2; dropsy of the brain, 1; erysipelas, 4; scarlet fever, 9; typhoid fever, 1; gangrene, 1; gastritis, 2; disease of the heart, 7; jaundice, 1; disease of the kidneys, 3; laryngitis, 1; congestion of the lungs, 1; inflammation of the lungs, 26; marasmus, 7; neuralgia, 2; old age, 4; paralysis, 4; premature birth, 3; peritonitis, 2; puerperal disease, 4; whooping cough, 6.

Under 5 years of age, 43; between 5 and 20 years, 18; between 20 and 40 years, 31; between 40 and 60 years, 24; over 60 years, 33. Born in the United States, 92; Ireland, 45; other places, 12.